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<p>Substitute for form 1449A/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p>(use as many sheets as necessary)</p>		Application Number	10/041,957		
		Filing Date	1/7/02		
		First Named Inventor	Steven Teig		
		Group Art Unit			
		Examiner Name			
Sheet	1	of	1	Attorney Docket Number	SPLX.P0044

U.S. PATENT DOCUMENTS						
Examiner* Initials	Cite No.	U.S. Patent Document		Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Related Application Data
		Number				
ST	1.	2003/0101428 S/N 10/040,915		01-05-2002	Steven Teig et al.	Previously specified
	2.	2003/0043827 S/N 10/040,953		01-05-2002	Steven Teig et al.	Previously specified
	3.	2003/0023943 S/N 10/040,954		01-05-2002	Steven Teig et al.	Previously specified
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	6.	2002/0199165 S/N 10/046,864		01-13-2002	Steven Teig et al.	Previously specified
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	13.	2003/0088845 S/N 10/047,978		01-13-2002	Steven Teig et al.	Continuation of the parent application (2003/0079193) of the present application.

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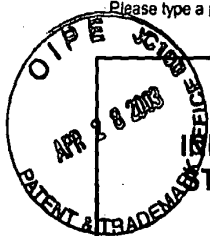
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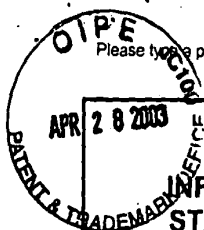
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<input checked="" type="checkbox"/>	38.	6,247,167	B1	Raspopovic et al.	06-12-01	
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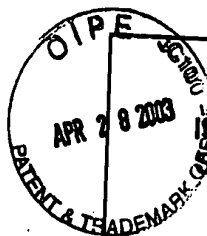
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Sheet	3	of	3	Attorney Docket Number	SPLX.P0044

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Examiner* Initials	Cite No. <sup>1</sup>	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>8</sup>
		Office <sup>3</sup>	Number <sup>4</sup> (if known) <sup>5</sup>				
BT	55.	JP	64-15947	Ouchi	01-19-89		
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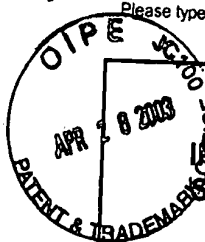
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NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>	
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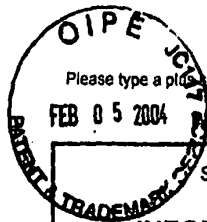
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	2.	2002/0182 844	A1	12-05-2002	Igarashi et al.	
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Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 7

Application Number	10/041,957
Filing Date	1/7/02
First Named Inventor	Steven Teig
Group Art Unit	2825
Examiner Name	Bihn Tat
Attorney Docket Number	SPLX.P0044

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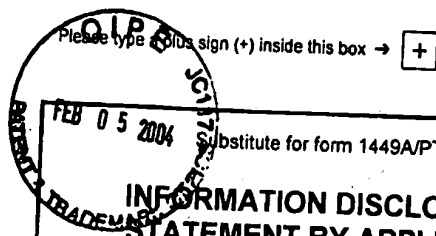
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Filing Date	1/7/02	
		First Named Inventor	Steven Teig	
		Group Art Unit	2825	
		Examiner Name	Bihn Tat	
Sheet	3	7	Attorney Docket Number	SPLX.P0044

FOREIGN PATENT DOCUMENTS								
Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code (if known)				
BV	42.	JP	411296560	A	Matsumoto et al.	10-29-1999	with English translation of Abstract;	
	43. ✓	JP	2000-82743	A	Igarashi et al.	03-21-2000	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
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	46. ✓	JP	H05-102305	A	Akihiro Sato	04-23-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
Bf	47. ✓	JP	H07-86407	A	Shinpei Miura	03-31-1995	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓

Examiner Signature		Date Considered	05/14/02
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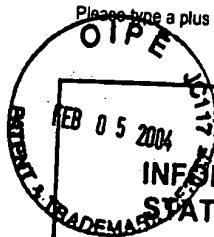
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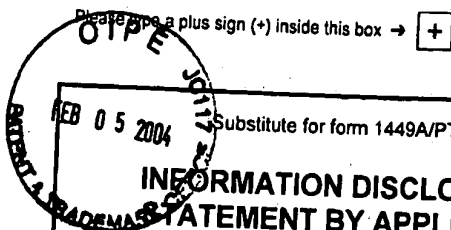
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			Examiner Name	Bihn Tat
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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
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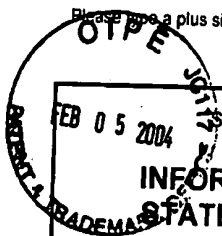
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Substitute for form 1449A/PTO			Application Number	10/041,957
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			Group Art Unit	2825
			Examiner Name	Bihn Tat
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Substitute for form 1449/PTO		Application Number	10/041,957	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)		Filing Date	1/7/02	
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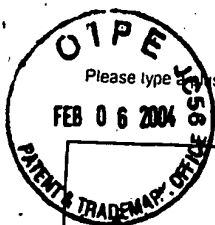
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Substitute for form 1449A/PTO				Application Number	10/041,957
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Filing Date	1/7/02
				First Named Inventor	Steven Teig
				Group Art Unit	
				Examiner Name	
Sheet	1	of	1	Attorney Docket Number	SPLX.P0044

# U.S. PATENT DOCUMENTS

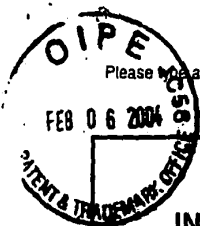
Examiner's Initials	Cite No.	U.S. Patent Document		Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Related Application Data
		Number				
B5	1.	2003/0101428 S/N 10/040,915		01-05-2002	Steven Teig et al.	Previously specified
	2.	2003/0043827 S/N 10/040,953		01-05-2002	Steven Teig et al.	Previously specified
	3.	2003/0023943 S/N 10/040,954		01-05-2002	Steven Teig et al.	Previously specified
	4.	2003/0066042 S/N 10/040,963		01-05-2002	Steven Teig et al.	Previously specified
	5.	2002/0174412 S/N 10/041,942		01-07-2002	Steven Teig et al.	Previously specified
	6.	2002/0199165 S/N 10/046,864		01-13-2002	Steven Teig et al.	Previously specified
	7.	2003/0056187 S/N 10/047,982		01-14-2002	Steven Teig et al.	Previously specified
	8.	2002/0073390 S/N 09/737,210		12-13-2000	Steven Teig et al.	Previously specified
	9.	2002/0124231 S/N 09/739,580		12-15-2000	Steven Teig et al.	Previously specified
	10.	2003/0121015 S/N 09/745,067		12-19-2000	Steven Teig et al.	Previously specified
	11.	2002/0166105 S/N 10/040,948		01-05-2002	Steven Teig et al.	Previously Specified
	12.	2003/0088841 S/N 10/329,241		12-23-2002	Steven Teig et al.	Previously specified
B5	13.	2003/0088845 S/N 10/047,978		01-13-2002	Steven Teig et al.	Continuation of the parent application (2003/0079193) of the present application.

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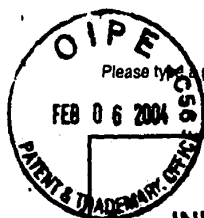
U.S. PATENT DOCUMENTS					
Examiner* Initials	Cite No.	U.S. Patent Document Number Kind Code* (if known)	Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
B	1.	2001/0009 031	A1	07-19-2001	Nitta et al.
	2.	2002/0182 844	A1	12-05-2002	Igarashi et al.
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B	20.	6,150,193		11-21-2000	Glenn

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<b>Sheet</b>	2		7	<b>Attorney Docket Number</b>	SPLX.P0044

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BT	21.	6,209,123	B1	03-27-2001	Maziasz et al.	
	22.	6,219,832	B1	04-17-2001	Buzbee	
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	31.	6,327,693	B1	12-04-2001	Cheng et al.	
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	34.	6,415,422	B1	07-02-2002	Mehrotra et al.	
	35.	6,448,591	B1	09-10-2002	Juengling	
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	37.	6,519,751	B2	02-11-2003	Sriram et al.	
	38.	6,543,043	B1	04-01-2003	Wang et al.	
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	40.	6,557,145	B2	04-29-2003	Boyle et al.	
BT	41.	6,567,967	B2	05-20-2003	Greidinger et al.	

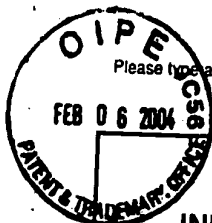
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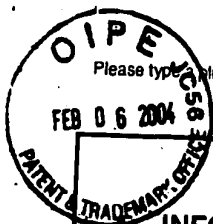
FOREIGN PATENT DOCUMENTS								
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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Cod (if known)				
B	42.	JP	411296560	A	Matsumoto et al.	10-29-1999	with English translation of Abstract;	
	43.	JP	2000-82743	A	Igarashi et al.	03-21-2000	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	44.	JP	H03-173471	A	Tawada et al.	07-26-1991	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	45.	JP	H05-243379	A	Masako Kubota	09-21-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
	46.	JP	H05-102305	A	Akihiro Sato	04-23-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
B	47.	JP	H07-86407	A	Shinpei Miura	03-31-1995	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓

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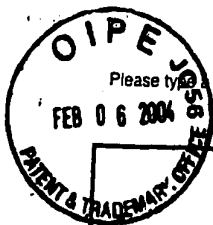
FOREIGN PATENT DOCUMENTS								
135	48.	JP	H09-162279	A	Masaaki Yoshida	06-20-1997	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓

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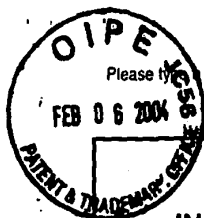
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
B5	49.	Ahuja, R. et al., Faster Algorithms for the Shortest Path Problem, Journal of the Association for Computing Machinery, vol. 37, No. 2, April 1990, pp. 213-223.	
	50.	Brady, L. et al., Channel Routing on a 60° Grid, extended abstract, pp. 956-931.	
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	60.	Hom, I. et al., Estimation of the Number of Routing Layers and Total Wirelength in a PCB Through Wiring Distribution Analysis, 1996, pp. 1-6.	
	61.	Hong, X. et al., Performance-Driven Steiner Tree Algorithms for Global Routing, 30 <sup>th</sup> ACM/IEEE Design Automation Conference, 1993, pp. 177-181.	

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<b>Sheet</b>	6		7	<b>Attorney Docket Number</b>	SPLX.P0044

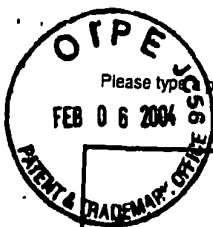
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<b>Examiner Signature</b>		<b>Date Considered</b>	05/14/04
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<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Application Number</b>	10/041,957
				<b>Filing Date</b>	1/7/02
				<b>First Named Inventor</b>	Steven Teig
				<b>Group Art Unit</b>	2825
				<b>Examiner Name</b>	Bihn Tat
<b>Sheet</b>	7		7	<b>Attorney Docket Number</b>	SPLX.P0044

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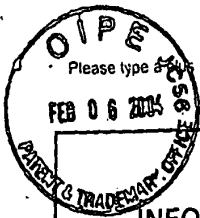
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Filing Date	1/4/02
				First Named Inventor	Steven Teig
				Group Art Unit	
				Examiner Name	
Sheet	1	of	1	Attorney Docket Number	SPLX.P0044

RELATED U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No.	U.S. Patent Document Number	Date of Filing MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Related Application Data	
BT	1.	2003/0079193	12-07-2001	Steven Teig et al.	Parent application; present application is a continuation of 2003/079193.	
	2.	2003/0018947	12-07-2001	Steven Teig et al.	Application filed on the same day as the parent application 2003/0079193, with the same specification as the present application except for summary and abstract.	
	3.	2002/0147958	10-19-2001	Steven Teig et al.	Parent application per the preliminary amendment dated 2/19/03.	
	4.	2003/0063614	01-04-2002	Steven Teig et al.	Application with some of the same parent provisional applications and with the same specification as the present application except for summary and abstract.	
	5.	2003/0064559	01-04-2002	Steven Teig et al.	Application with some of the same parent provisional applications and with the same specification as the present application except for summary and abstract.	
	6.	2003/0063568	01-04-2002	Steven Teig et al.	Application with some of the same parent provisional applications and with the same specification as the present application except for summary and abstract.	
	7.	2003/0101428	01-05-2002	Steven Teig et al.	Continuation of 2003/0079193.	
	8.	2002/0166105	01-05-2002	Steven Teig et al.	Continuation of 2003/0079193.	
	9.	2003/0043827	01-05-2002	Steven Teig et al.	Continuation of 2003/0079193.	
	10.	2003/0023943	01-05-2002	Steven Teig et al.	Continuation of 2003/0079193.	
	11.	2003/0066042	01-05-2002	Steven Teig et al.	Continuation of 2003/0079193.	
	12.	2002/0174412	01-07-2002	Steven Teig et al.	Continuation of 2003/0079193.	
	13.	2002/0199165	01-13-2002	Steven Teig et al.	Continuation of 2003/0079193.	
BT	14.	2003/0066043	01-13-2002	Steven Teig et al.	Continuation of 2003/0088844 per preliminary amendment.	

Examiner Signature	<i>B. Huet</i>	Date Considered	05/14/04
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				First Named Inventor	Steven Teig
				Group Art Unit	
				Examiner Name	
Sheet	2	of	2	Attorney Docket Number	SPLX.P0044

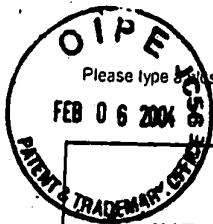
RELATED U.S. PATENT DOCUMENTS					
<u>15</u>	15.	2003/0115566	01-13-2002	Steven Teig	Continuation of 2003/0088844 per preliminary amendment.
	16.	2003/0056187	01-14-2002	Steven Teig et al.	Continuation of 2003/0079193.
	17.	2003/0066044	01-13-2002	Steven Teig et al.	Application with some of the same parent provisional applications and with the same specification as the present application except for summary and abstract.
	18.	2003/0066045	01-13-2002	Steven Teig et al.	Application with some of the same parent provisional applications and with the same specification as the present application except for summary and abstract.
	19.	2002/0133798	12-06-2000	Steven Teig et al.	Application regarding related placement technology
	20.	2002/0100007	12-06-2000	Steven Teig et al.	Application regarding related placement technology
	21.	2002/0073390	12-13-2000	Steven Teig et al.	Application regarding related placement technology
	22.	S/N 09/737,220	12-13-2000	Steven Teig et al.	Application regarding related placement technology
	23.	S/N 09/737,245	12-13-2000	Steven Teig et al.	Application regarding related placement technology
	24.	S/N 09/739,460	12-15-2000	Steven Teig et al.	Application regarding related placement technology
	25.	2002/0124231	12-15-2000	Steven Teig et al.	Application regarding related placement technology
	26.	S/N 09/739,589	12-15-2000	Steven Teig et al.	Application regarding related placement technology
	27.	S/N 09/742,171	12-19-2000	Steven Teig et al.	Application regarding related placement technology
	28.	2003/0121015	12-19-2000	Steven Teig et al.	Application regarding related placement technology
	29.	2002/0069397	01-13-2002	Steven Teig et al.	Application regarding related placement technology
<u>30</u>	30.	2002/0170027	02-20-2002	Steven Teig et al.	Application regarding related placement

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				Examiner Name	
Sheet	3	of	3	Attorney Docket Number	SPLX.P0044

RELATED U.S. PATENT DOCUMENTS						
						technology
31.	2002/0157075	02-20-2002	Steven Teig et al.	Application regarding related placement	technology	
32.	2003/0088841	12-23-2002	Steven Teig et al.	Application regarding related placement	technology	

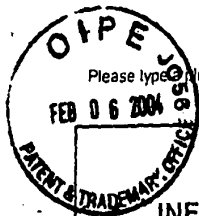
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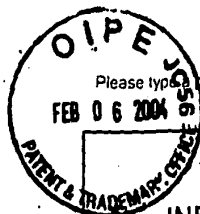
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Sheet	1	of	1	Attorney Docket Number	SPLX.P0044

U.S. PATENT DOCUMENTS						
Examiner* Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code* (if known)			
BT	1.	2001/ 0003843	A1	Scepanovic et al.	06-14-01	
	2.	4,615,011		Linsker	09-30-86	
	3.	4,673,966		Shimoyama	06-16-87	
	4.	4,782,193		Linsker	11-01-88	
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	16.	5,650,653		Rostoker et al.	07-22-97	
	17.	5,657,242		Sekiyama et al.	08-12-97	
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	21.	5,777,360		Rostoker et al.	07-07-98	
	22.	5,811,863		Rostoker et al.	09-22-98	
	23.	5,822,214		Rostoker et al.	10-13-98	
BT	24.	5,859,449		Kobayashi et al.	01-12-99	

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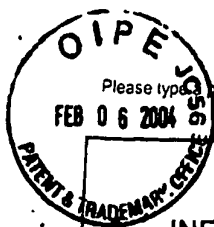
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Sheet	2	of	2	Attorney Docket Number	SPLX.P0044

U.S. PATENT DOCUMENTS						
BT	25.	5,898,597		Scepanovic et al.	04-27-99	
	26.	5,914,887		Scepanovic et al.	06-22-99	
	27.	5,973,376		Rostoker et al.	10-26-99	
	28.	6,035,108		Kikuchi	03-07-00	
	29.	6,058,254		Scepanovic et al.	05-02-00	
	30.	6,067,409		Scepanovic et al.	05-23-00	
	31.	6,068,662		Scepanovic et al.	05-30-00	
	32.	6,123,736		Pavisc et al.	09-26-00	
	33.	6,134,702		Scepanovic et al.	10-17-00	
	34.	6,155,725		Scepanovic et al.	12-05-00	
	35.	6,175,950	B1	Scepanovic	01-16-01	
	36.	6,216,252	B1	Dangelo et al.	04-10-01	
	37.	6,230,306	B1	Raspopovic et al.	05-08-01	
	38.	6,247,167	B1	Raspopovic et al.	06-12-01	
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<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Application Number</b>	10/041,957
				<b>Filing Date</b>	1/7/02
				<b>First Named Inventor</b>	Steven Teig
				<b>Group Art Unit</b>	2825
				<b>Examiner Name</b>	
<b>Sheet</b>	3	<b>of</b>	3	<b>Attorney Docket Number</b>	SPLX.P0044

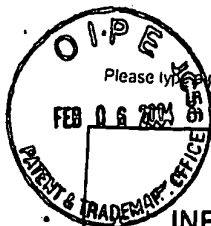
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Examiner's Initials	Cite No. <sup>1</sup>	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office <sup>2</sup>	Number <sup>3</sup> Kind Code (if known) <sup>4</sup>			
BT	55.	JP	64-15947	Ouchi	01-19-89	
BT	56.	JP	04000677	Fujiwara et al.	01-1992	

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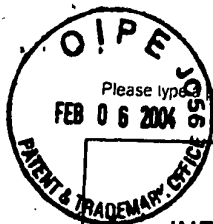
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				Examiner Name	
Sheet	4	of	4	Attorney Docket Number	SPLX.P0044

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Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>3</sup>
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